Public Works (1908) Department.

G.O., No. 71/72 - I

DATED 11 · 2 · 1908

19.2.08

130/3, 70/2 of endorsements

[Despatch Abstract.]

Improvements to certain tanks, Periyar System

Estimates for ——— Sanctioned and a Copy of the Proceedings, ordered to be forwarded to the Govt of India for information

Improvements to certain tanks, Periyar System

Forwarding to the Govt of India a Copy of the Pros: Sanctioning Estimates for ———

[P. W. 2. 2,000—8-7-07.]

Indexed

K.9/CS/[illegible]/

Registered

[illegible] 12.2.08

[illegible] 11/2

[illegible] [illegible]/2/08

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

IRRIGATION.
ACCOUNTS.

Government of Madras.

PUBLIC WORKS DEPARTMENT.

Recd. 1908. *Enclosures*

Regd. *Spare copies*

G.O., Nos. 71, 72 I., 11th February 1908.

Improvements to certain tanks, Periyar system

Forwarding to the Government of India a copy of the Proceedings sanctioning estimates for —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Accounts.

Read—the following papers:—

I

From the Superintending Engineer,	VI Circle,	dated	29th Mar.	1907,	No.	213-C.E.
,,	,,	VI ,,	,,	9th April	,,	,,	221-C.E.
,,	,,	VI ,,	,,	11th ,,	,,	,,	226-C.E.
,,	,,	VI ,,	,,	15th ,,	,,	,,	235-C.E.
To the	,,	VI ,,	,,	25th June	,,	,,	2488.
,,	,,	VI ,,	,,	19th Oct.	,,	,,	4054.
From the	,,	VI ,,	,,	30th ,,	,,	,,	591-C.E.
,,	,,	VI ,,	,,	11th Dec.	,,	,,	649-C.E.

Enclosures.

(1) *Report to accompany the estimate for repairs and improvements to No.* 81, *Kalaman kanmoi, Mélúr taluk.*

Amount of estimate—	RS.
Repairs ...	70
Improvements ...	1,060
Total ...	1,130

Situation and source of supply.—The tank is situated at a distance of about 2 miles to the south-east of Mélúr and on the east side of the road from Mélúr to Sivaganga. In addition to the drainage from its own catchment, it receives also the surplus of Navakkutti kanmoi and a supply of Periyár water from the 6th A and 7th Distributary, XII. Branch channel.

Surplus arrangements.—The tank is at present surplussing by means of an open cut at its left flank through which 7th distributary water also goes to Sathamangalam tank. A weir will be built at the site sufficiently long to pass off the maximum discharge with a head of 1½ feet. A vent (2′ × 1½′) will also be provided in the weir for the supply of Periyár water to No. 83 Sathamangalam tank.

Ayacut.—The tank has got an ayacut of 125·18 acres which is at present irrigated by means of a pot sluice, a masonry sluice and two open cuts. A pipe sluice will be built at the site of the pot sluice and a masonry sluice at the site of the one of the open cuts. The other open cut will be closed. The existing masonry sluice is in a very bad order and will be demolished. A new masonry sluice will be built in its stead 10 feet removed from it.

Bund.—It is of more than sufficient height almost throughout the length. In places where it is low it will be raised to 4½ feet above F.T.L. and formed with a top width of 4 feet and side slopes 1½ to 1.

F.T.L.—This has been fixed with reference to the water marks observed and enquiries made from the ryots and with reference to submergence which is only mamul and therefore no consideration need be paid to the submergence.

R. deChazal,
Executive Engineer, Madura Division.

(2) *Report to accompany the estimate for repairs and improvements to No. 8 Padathalaikurichi kanmoi, Mélúr taluk.*

Amount of estimate—		RS.
Improvements	...	1,570
Repairs	...	375
	Total ...	1,945

The tank is situated in the north-west corner of Narasingampatti village, Mélúr taluk, and is one of those proposed to be maintained in G.O., No. 1250 I., dated 15th December 1905.

It has an ayacut of 119·48 acres and receives its Periyár supply from sluice No. 7 in the X. Branch channel, in addition to the supply from its own catchment area.

The surplus at present flows over a ruined masonry escape at the left flank. It is now proposed to construct a weir 130 feet long at the same site, so as to be capable of discharging with a head of 2 feet the maximum quantity estimated as likely to enter the tank.

The ayacut under the tank is now irrigated by means of a masonry sluice and three country pot sluices which are all in a ruined state. It is now proposed to construct a masonry sluice and two cement pipe sluices so as to command the whole ayacut under the tank.

The bund is very weak. It will be raised to 3 feet above M.W.L. with a top width of 4 feet and side slopes of 2 to 1 both in front and rear. These slopes are allowed, as the soil with which the bund is formed, is said to be inferior.

The F.T.L. of the tank has been fixed with reference to the water marks observed on the foreshore and from enquiries made. The patta lands submerged at F.T.L. and shown in the statement enclosed are subject to mamul submergence and no consideration need be paid to them.

C. W. WOOD,
Superintending Engineer, VI Circle.

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(3) *Report to accompany the estimate for repairs and improvements to Sathamangalam Kanmoi, Mélúr taluk.*

Amount of estimate—		RS.
Repairs	...	165
Improvements	...	3,350
	Total ...	3,515

Situation and source of supply.—The tank is situated at a distance of about half a mile to the west of Sathamangalam village. In addition to the drainage from its own catchment it receives also the surplus of three upper tanks which is augmented by a supply of Periyár water from 7th Distributary, XII. Branch channel.

Surplus arrangements.—The tank is at present surplussing by means of a big breach at the left flank. The ryots feel considerable difficulty in closing the breach and storing water to F.T.L. It is proposed to construct a weir 207 feet long at that flank a little removed from the breach site and to the right of it. The breach will be closed and reveted

Ayacut.—The tank has got an ayacut of 186·97 acres which are at present irrigable by means of two masonry sluices which are in good order. But there is no arrangement for regulating the water ; and closing and opening the vent is found to be very difficult when water is at F.T.L. as the front head wall especially of No. 2 sluice is far removed into the tank-bed and as there is a depth of 11½ feet of water over the sill. The front head wall of No. 1 sluice is higher than the M.W.L. of the tank and it is therefore sufficient if it is connected by a path (formed) at a level higher than the M.W.L. with the centre of bund to enable one to reach it when water is at a high level. Provision has been made in the estimate accordingly as also for providing regulating arrangements. A new front head will be built for No. 2 sluice.

Bund.—The bund is subjected to the wave action on account of its peculiar position and being a big tank revetment is necessary. F.T.L. has been fixed with reference to the water marks observed and consequently requires no consideration.

General.—The tank bund is overgrown with trees which does not allow man and horse to pass over and those will be cleared to a clear width of 8 feet.

Statement of patta lands submerged at F.T.L. (mamul) is also attached.

R. DECHAZAL,
Executive Engineer, Madura Division.

---

(4) *Report to accompany the estimate for improvements and repairs to No.* 80, *Perungaraiyan Kanmoi of Mélúr taluk.*

	RS.
Amount of estimate—	
Improvements	2,040
Repairs	95
Total	2,135

Situation and source of supply.—The tank is situated at a distance of about three-quarter of a mile to the east Vennamparaipatti village. In addition to the drainage from its own free basin, it receives also the surplus of Sathamangalam kanmoi augmented by a supply of Periyár water from the 6th A. Distributary of XII. Branch channel.

Surplus arrangements.—The tank at present surpluses by means of a big open cut at the left flank. The ryots feel considerable difficulty in closing the breach and storing water to F.T.L. It is now proposed to construct a weir 150 feet long at the site shown in the sketch map.

Ayacut.—The tank has an ayacut of 159·42 acres which is at present irrigated by means of a pot sluice and two masonry sluices. The head of one of the masonry sluices has recently been built and its barrel is in good order. The rear cistern requires some repairs for which provision has been made in the repair estimate. The other masonry sluice is also in good order except that it requires regulating arrangements and some slight repairs to its rear cistern. A pipe sluice will be built in place of the existing pot sluice.

Bund and revetment.—The bund is sufficiently high. Owing to its peculiar situation especially where the Mélúr-Sivaganga road passes over it, it is eroded by waves and in these places a new revetment will be built. Wild cane has been planted in the portion where the revetment has now been proposed. But this has not resisted the waves.

F.T.L.—This has been fixed with reference to the water marks observed and enquiries made from ryots.

Submergence.—A statement of mamul submerged lands is appended.

The Pappan kanmoi is also numbered 80 in the list of imperial tanks; its F.T.L. is 3·75 feet higher than Perungaraiyan kanmoi, which is to be restored now. The Pappan kanmoi will be dealt with separately.

R. DECHAZEL,
Executive Engineer, Madura Division.

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(5) *Report to accompany the estimate for repairs and improvements to No.* 85, *Polimbi kanmoi, Mélúr taluk.*

	RS.
Amount of estimate—	
Repairs	70
Improvements	1,335
Total ...	1,405

Situation and source of supply.—The tank is situated at a distance of about half a mile to the north-west of Sathamangalam village. In addition to the drainage from its own free basin it receives also a supply of Periyár water through sluices Nos. 25 and 26 and 9th distributary of XII Branch channel.

Surplus arrangements.—The tank is at present surplussing by means of an open cut at its right flank. Provision has been made in the estimate for constructing a weir 74·5 feet long at the site with roughstone revetment on both sides to discharge the maximum flood entering the tank.

Ayacut.—The tank has got an ayacut of 92·96 acres and the whole extent is being irrigated by three pot sluices and a masonry sluice. The masonry sluice is in good order and will be left as it is. The high level ayacut at the right flank will be commanded by a vent (1 foot square) to be opened in the weir proposed at the right flank. Two other pipe sluices will be built to command the remaining ayacut.

Bund.—The bund is low and weak and provision has been made in the estimate for raising the bund to 4½ feet above F.T.L. with a top width of 4 feet and side slopes 1½ to 1.

F.T.L.—This has been fixed with reference to the water marks observed and enquiries made from the ryots.

Submergence.—It is only mamul and no consideration need therefore be paid to it.

General.—Revetment will be provided at the righ flank from the weir to high ground as there is a supply channel entering the tank at that flank. A lump sum provision has been made in the repair estimate for forming a gravel ramp 12 feet wide at the left flank where a cart-track crosses the bund. The nature of the soil does not warrant the provision of either turfing or gravelling.

R. DECHAZEL,
Executive Engineer, Madura Division.

---

(6) *Report to accompany the estimate for repairs and improvements to No. 82. Navakkutti kanmoi, Mélúr taluk.*

	RS.
Amount of estimate—	
Repairs	185
Improvements	1,060
Total ...	1,245

Situation and source of supply.—The tank is situated at a distance of about one and a half miles to the south-east of Mélúr and one and a half miles to the south of Navinipatti. In addition to the drainage from its free basin it receives also a supply of Periyár water from 6th A. Distributary (From L. B. 12″ pipe sluice at 1 mile of 50 feet).

Surplus arrangements.—The tank is at present surplussing at its right flank through an open cut. Provision has been made in the estimate for constructing a weir at the site 110 feet long, a masonry wing having been provided on the right side where there is the deep scour of the surplus course.

Ayacut.—The tank has got an ayacut of 70·73 acres and the whole extent is now being irrigated by pot sluices. Provision has been made in the estimate for constructing three pipe sluices so as to command the whole ayacut.

Bund.—The bund is low and weak in places and provision has been made in the estimate for raising the bund to 4½ feet above F.T.L. and widening the top to 4 feet with side slopes of 1½ to 1. The top of the bund will be gravelled* and the slopes turfed.

* By the south-east 2 inches thick, turfing, omitted.

F.T.L.—This has been fixed with reference to the water marks observed and enquiries made from the ryots.

Submergence.—There are only 0·20 acre of wet lands liable to submergence at F.T.L. and this submergence is only mamul.

R. DECHAZEL,
Executive Engineer, Madura Division.

II

Note by the Chief Engineer for Irrigation.

With the letters read above, the Superintending Engineer, VI Circle, submitted estimates, amounting to Rs. 1,060, 1,570, 3,350, 2,040, 1,335 and 1,060, for improvements to (1) Kalaman kanmoi, (2) Padathalaikurichi kanmoi, (3) Sathamangalam kanmoi, (4) Perungaraiyan kanmoi, (5) Polimbi kanmoi and (6) Navakkutti kanmoi tanks respectively.

2. In the first of the letters read above, the Superintending Engineer reported that the present Executive Engineer of Madura (Mr. deChazal) considered that a coefficient of 350 against 500 generally used in formula $D = CM^{\frac{2}{3}}$ for calculating the maximum flood discharges from the catchment areas of tanks was sufficient and that the surplus works of the tanks were designed to dispose of the discharges from their catchment areas calculated with the lower coefficient.

3. In this office memorandum No. 2488, dated 25th June 1907, the Superintending Engineer was requested to reconsider his proposal to reduce the coefficient from 500 to 350 in calculating the discharge from surplus works in the tanks affected by the Periyár system as some superpassages orginally designed with a coefficient of 430 were found inadequate during the floods of 1894 and that they were subsequently altered to suit a higher coefficient of 700.

4. The Superintending Engineer now reports that as the Executive Engineer has not been able to produce any satisfactory reasons for reducing the coefficient from 500 to 350, he is not in favour of using a coefficient lower than 500 for the calculation of the maximum flood discharges of tanks in the Periyár affected area.

5. The maximum flood discharges from the catchment areas of the tanks referred to above have now been recalculated using a coefficient of 500, the lengths of the surplus escapes being increased accordingly. Besides the alteration in the lengths of the surplus escapes of all the above six tanks, concrete aprons have been substituted for drystone aprons provided for the escapes of Sathamangalam, Perungaraiyan and Navakkutti kanmoi tanks, sloping wings have been allowed for some of the sluices in the Kalaman and Polimbi kanmoi tanks and the proposed circular tower head of the sluice in the Sathamangalam kanmoi has been replaced by a square tower head. These alterations have increased the amounts of the estimates as detailed below :—

	From.	To.
	RS.	RS.
(1) Kalaman kanmoi	1,060	1,330
(2) Padathalaikurichi kanmoi	1,570	1,695
(3) Sathamangalam „	3,350	4,035
(4) Perungaraiyan „	2,040	2,560
(5) Polimbi „	1,335	1,530
(6) Navakkutti „	1,060	1,330
Total ...	10,415	12,480

The estimates as revised in this office are recommended for sanction.

H. E. CLERK,
Ag. Chief Engineer for Irrigation.

6th February 1908.

Order—No. 71 I., dated 11th February 1908.

The following estimates are sanctioned :—

Imperial.
Irrigation.
49. Capital expenditure not charged to Revenue.
Periyár System.
Open Capital Account.
I. Works.
3. Distributaries.
C. Works.
Unremunerative Work.

(1) Improvements to Kalaman kanmoi.

	RS.
Estimate—	
I. Works	1,330
II. Establishment	306
Total ...	1,636

(2) Improvements to Padathalaikurichi kanmoi.

Estimate—	
I. Works	1,695
II. Establishment	390
Total ...	2,085

(3) Improvements to Sathamangalam kanmoi.

Estimate—	
I. Works	4,035
II. Establishment	928
Total ...	4,963

(4) Improvements to Perungariyan kanmoi.

Estimate—	
I. Works	2,560
II. Establishment	589
Total ...	3,149

(5) Improvements to Polimbi kanmoi.

Estimate—	
I. Works	1,530
II. Establishment	352
Total ...	1,882

(6) Improvements to Navakkutti kanmoi.

Estimate—	
I. Works	1,330
II. Establishment	306
Total ...	1,636

2. These sanctions are registered as No. 159 I. of 1907–1908 and will expire on the 31st March 1909.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

[Here enter No. 72 I., dated 11th February 1908.]

(True Extract.)

H. E. Clerk,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
,, Superintending Engineer, VI Circle, with plans and estimates.
,, Examiner, Public Works Accounts.

Endorsement—No. 72 I., dated 11th February 1908.

Forwarded.

(By order.)

H. E. Clerk,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

1000—18.8.06.

CURRENT FILE.

Stock Form No. 141
10,000—29-6-05.

PUBLIC WORKS DEPARTMENT.

1

CURRENT No. 9257 ~~213 C.E~~

Received 6.4. 1907.

Registered " 190 .

ENCLOSURES. Plans No. 6. Others No. 1. Total 7

SPARE COPIES.

Passed on by Registering Clerk ...
" " U. R. Clerk ...
" " Referencer ...
" " Record Superintendent
" " Drafting Officer ...

Subject

Kalaman Kanmoy Periyar affected tank. Submitting for sanction an estimate Rs ~~1060~~ 1330 for Improvements to,

No. 213 C.E

Station Trichinopoly. Dated the 29 march 1907.

From (Name) S. D. Pears Esq.,

(Designation) Superintending Engineer VI Circle

To The Chief Engineer for Irrigation ~~The Secretary~~ to the Government of Madras, Public Works Department

Sir,

I have the honour to forward herewith for your approval and sanction of Government an estimate amounting to Rs ~~1060~~ 1330 (1060) for improvements to no 81 Kalaman kanmoy, one of the Periyar affected tanks ordered to be retained in Melur Taluq, as per G. O no 1250 I dated 15th december 1905

2 For calculating the maximum flood dis-charge from catchment basins in the

Periyar

T

Registd.

L.H.

C.E.I. 13 9.4.07

Dn 6.4.07

Nag. W.

R 8/4/07

2

Periyar Sub division 500 has usually been adopted for the value of C in Ryves formula $D = C M^{2/3}$. The present Executive Engineer Madura thinks 350 enough. In the light of the experience at Ramarajapuram surplus escape (for the improvements of which an estimate has been submitted for sanction with this office no 197 CR d/22.3.07) the catchment of which moreover is mostly hilly, I am inclined to agree with him and have therefore not altered the estimate in this respect.

R 2034 907. with (clearing checks) Sent to Obj with draft order on 6/5/07

G.O. No 2333 I d/ 22.5

3. In the report attached to the estimate the Executive Engineer fully explains the necessity for, and the details of the works proposed.

4. As no increase in ~~the~~ Revenue can be expected by the proposed improvements they have been classified as "unremunerative". If sanctioned at once they should be completed by the end of March 1908.

5. An estimate amounting to Rs 70 for repairs to the tank has been sanctioned by the Executive Engineer Madura Division.

I have ~~the~~ the honour to be
Sir
Your most obedient Servant
S. J. Sears.
Superintending Engineer
VI Circle.

P.V.

Stock Form No. 141
10,000.—29-6-06.

PUBLIC WORKS DEPARTMENT. PAGE 2 3

CURRENT No. 2361 ~~22/C.E.~~

Received 11. 4. 1907.

Registered " 1907.

ENCLOSURES. 5
Plans No. 4
Others No. 1
Total 5

Passed on by Registering Clerk ...
" " U. R. Clerk ...
" " Referencer ...
" " Record Superintendent.
" " Drafting Officer ...

SPARE COPIES. 6

Subject

Sathamangalam Kannoy

Forwarding for sanction estimate Rs ~~3350~~ 4035 for improvements to

No. 22/C.E.

Station, Trichinopoly. Dated the 9 April 1907.

Register

From (Name) C. W. Wood Esquire.,

(Designation) Superintending Engineer, VI Circle,

To The Chief Engineer for Irrigation to the Government of Madras, ~~The Secretary,~~

Public Works Department

Due 11/4/07

Sir,

I have the honour to forward herewith for your approval and Sanction of Government an estimate amounting to Rs. ~~3,350~~ 4035 /- (stet) for improvements to No. 83 Sathamangalam Kannoy one of the Periyar affected tanks

PAGE 4

Flag I

ordered to be maintained in G.O. No. 1250-I, dated 15th December 1905.

2. In the report attached to the estimate, the Executive Engineer fully explains the necessity for and the details of the works proposed.

3. As no increase in revenue can be expected by the proposed improvements, the works have been classified as unremunerative and it is hoped they will be completed before the end of March 1908, if the estimate is sanctioned soon.

4. An estimate amounting to Rs.165/- for repairs to the tank has been sanctioned by the Executive Engineer.

I have the honour to be,
Sir,
Your most obedient Servant,
C. W. Wood
Superintending Engineer,
VI Circle.

P.
6-11-07.

5

5

Stock Form No. 141
10,000—29-6-05.

PUBLIC WORKS DEPARTMENT.

CURRENT NO. 2437 ~~226 CE~~

Received 15-4-1907.

Registered " 190

ENCLOSURES. Plans No. 15 / Others No. 3 / Total × 18

× Sent separately

SPARE COPIES.

Passed on by Registering Clerk ...
" " U. R. Clerk ...
" " Referencer ...
" " Record Superintendent.
" " Drafting Officer ...

Subject

~~Tanks in Keelapanangudi Kannoy~~ group. Submitting for sanction estimates for improving —

No. 226 CE

Station Trichinopoly Dated the 11 april 1907.

From (Name) C. W. Wood. Esquire,

(Designation) Superintending Engineer, VI circle.

To The Chief Engineer for Irrigation ~~The Secretary to the Government of Madras~~

Public Works Department. madras.

Regr.

Dm 13/4/07

Sir,

I have the honor to forward herewith for your approval and sanction of Government under 49 open Capital account of the Periyar Project, the marginally noted 3 Estimates for Improvements to tanks in Keelapanangudy Kannoy Group, melur Taluq.

1. Improvements to No 80 Perungarayan Ky. Est. Rs ~~2040~~ 2560.
2. Improvements to No 85 Polimbi Kannoy. Est. Rs. ~~1335~~ 1530
3. Improvements to No 82 Navakutty Kannoy. Est. Rs ~~1060~~ 1330.

B 16/4/07

2.

2. The Estimates are accompanied by plans and full reports showing what is proposed to be done in each case.

PAGE 2

3. In G.O. No. 1250 I dated 15th December '05, Hay I approval was given to the retention of these tanks.

4. As no increase in revenue can be expected from any of these tanks by the proposed improvements, these works may be classified as "Unremunerative." They are expected to be completed before the end of March '08, if the Estimates are sanctioned soon.

5. The Estimates for repairs to the 3 tanks have been sanctioned by the Executive Engineer.

I have the honor to be,

Sir,

Your most obedient Servant,

C. W. Wood

Superintending Engineer

VI circle.

Stock Form No. 141
10,000–29-6-06.

7 ~~4~~

PUBLIC WORKS DEPARTMENT. ~~14~~

CURRENT No. 2568 ~~235CE~~

Received 19.4. 1907.

Registered " 1907.

ENCLOSURES. Plans No. 7
Others No. 1

Total 8

SPARE COPIES.

Passed on by Registering Clerk ...
" " U. R. Clerk ...
" " Referencer ...
" " Record Superintendent.
" " Drafting Officer ...

Subject

Padathalakurichi Kunmoy. Submitting for sanction an estimate Rs ~~1570~~ 1695 for —

No. 235CE

Re at C.

Station, Trichinopoly. Dated the 15 April 1907.

From (Name) C. W. Wood Esquire,

(Designation) Superintending Engineer, VI Circle.

To The Chief Engineer for Irrigation, ~~The Secretary~~ to the Government of Madras,

Public Works Department.

Sir,

I have the honour to forward herewith for your approval and sanction of Government under 49 open Capital account of the Periyar Project, an estimate amounting to Rs. ~~1570~~ 1695 for improvements to No 8 – Padathalakurichi Kunmoy of Melur Taluk.

Papers

Ind 12/4/07

19/4/07

2.

2. By the proposed improvements, no increase in revenue can be expected and the work has therefore been classified as "unremunerative". It will, if sanctioned soon, probably be completed before the 31st March 1908.

3. The report attached to the estimate clearly explains what is proposed to be done.

4. The estimate for repairs to the tank has been sanctioned by the Executive Engineer.

I have the honour to be,
Sir,
Your most obedient Servant,

C. W. Wood

Superintending Engineer,
VI Circle.

P.
3002
12.4.07.

7 No. 2488 Memo. 9

Current No. 2257
5/4/07

vide page 1 of cur file

With reference to Ex. Engineer's proposal to reduce the co-efficient from 500 to 350 in calculating the maximum flood discharge from the catchment areas of the tanks affected by the Periyar project for providing adequate surplus arrangements referred to in para 2 of S.E's letter No.213 C.E., dated 29-3-07, forwarding an estimate for improving the Kolaman Konmoi the Chief Engineer for irrigation is of opinion that the result experienced at the Ramarazupuram surplus work should not be taken as guide for deciding the surplus arrangements to be provided for the tanks affected by the Periyar project.

From the history of the Periyar project pages 142 & 143 it will be seen that the superpassages originally designed to carry the drainages of the Marangaliar & Shatliar streams over the Main Canal at 18 M 7F & 18 M 3 f calculated with a coefficient of 430 in formula $D = C M^{\frac{2}{3}}$ were found inadequate during the flood of 23-8-1894 and that they were subsequently altered to suit a coefficient of 700 in the same formula.

The Supg. Engineer is therefore requested to be so good as to reconsider the Ex. Engineer's proposal to adopt a reduced coefficient for the tanks in the area affected by the Periyar project and also to forward to

ack. only
put up my copy
return before
file goes down
to Madras
[illegible]

5/5
27/6/07

~~8~~ 10

They are not known vide history

this office as early as possible the observed discharge calculations of the above drainage streams at the superpassages referred to above.

The disposal of the estimates for the improvements of the Kolaman Konmoi and 4 other tanks submitted by the Supg. Engineer for sanction will be deferred pending receipt of a reply to this Memo from the S.E.

Current No. 2361 14/6/07 and Cur. No. 2437 15/6/07 put up below.

DESPATCHED
DATE 25/6 1907
ENCLO.

20/6/07

20/6/07

To

The Supg.Engineer,6th Circle.

15/6/07.

Memo

11

No 4054
19.10.07

The S.E. 6th circle is requested to be so good as to report when a reply to this office Memo No 2488 dated 25-6-07 may be expected in this office.

1. Kolam... kanmoi
2. Sathamangalam kanmoi
3. Perungarayan — " —
4. Polimbi kanmoi
5. Navakalu kanmoi
6. Podathalakurichi kanmoi

P.72 cf

The disposal of the estimates of the tanks noted in the margin are delayed pending receipt of a reply to the above memo.

[signature]
16/10/07

DESPATCHED
DATE 19/10/1907
ENCLOS.........

To
The Superintending Engr.
6th Circle

S.B.
14.10.07

[initials]
14/10/07

INDEXED

9 ~~10~~ ~~8~~ 12

Stock Form No. 141
10,000—16-11-05.

PUBLIC WORKS DEPARTMENT.

CURRENT No. 7058

ENCLOSURES. Plans No.
Others No.
Total

SPARE COPIES.

Received 31. 10 1907.

Registered Do 190 .

Passed on by Registering Clerk ...
,, ,, U. R. Clerk ...
,, ,, Referencer ...
,, ,, Record Superintendent.
,, ,, Drafting Officer ...

Subject.

Tanks affecting Periyar Project
stating that the information required about the —— will be furnished shortly

---

No. 591 CE

Station, Trichinopoly. *Dated the* 30th October 1907

From (Name) C. W. W O O D, Esquire.,

(Designation) Superintending Engineer, VI Circle.

To *The Chief Engineer* for Irrigation, ~~*The Secretary*~~ *to the Government of Madras,*

Public Works Department.

Sir,

P.99 Cf

With reference to your memorandum No.4054 dated -- 19th October 1907, I have the honour to inform you that the matter is under reference with the Executive Engineer, Madura Division, and that a reply to your Memo.No. 2488 dated 25th June 1907 will be sent on receipt of -- reply from him. A reminder has this day been sent to the Executive Engineer, Madura Division.

Rw 31/10/07
P 77 Cf

I have the honour to be,
Sir,
Your most obedient servant,

C. W. Wood
Superintending Engineer,
VI Circle.

28.10.07

1/11/07

Stock Form No. 141
10,000 – 29-6-06.

PUBLIC WORKS DEPARTMENT.

13

CURRENT No. 8098

ENCLOSURES. Plans No.
Others No.
Total

SPARE COPIES.

Received 14.12. 1907.
Registered " 190 .

Passed on by Registering Clerk ...
" " U. R. Clerk ...
" " Referencer ...
" " Record Superintendent.
" " Drafting Officer ...

Subject.

Tanks in the Periyar affected area — Informing that a coefficient of 500 may be used for the calculation of the maximum flood discharge of —

No. 649 C.E.

Station, Camp-Peranai *Dated the* 11 December 1907.
D/12

From (Name) J. H. Medlicott, Esquire.,

(Designation) Superintending Engineer, VI Circle.

To *The Chief Engineer* for Irrigation, ~~*The Secretary*~~ *to the Government of Madras,*

Public Works Department.

Sir,

With reference to the correspondence ending with this office No. 591-C.E., dated 30th October 1907, I have the honour to inform you that a coefficient of 500 may be used for the calculation of the maximum flood discharge of tanks in the Periyar affected area.

2. The Executive Engineer, Madura

T
KA

Rev 14/4/07 P 107 Cf

G.R.B 17.12.07

2038

M 17/12/07

Division, has not been able to produce any satisfactory reasons for reducing the coefficient. In Nellore, it has been found that a coefficient even of 800 or 900 does not give discharges equal to the actual discharges that have been gauged. I am not in favour of taking a coefficient lower than 500.

I have the honour to be,
Sir,
Your most obedient Servant,

A Sankarnarayan Aiyer
11-12-07
For Supdg: Engineer,
VI Circle.

JRB
8-12-07

-20-2-06.

NOTES.

To be stitched with the original
of G.O. No. $\frac{7}{72}$ I d 11.2.08

P.W.D., Irrigation Branch

Estimate for improvements to No.83 Sathamangalam Kanmoi.

--

(C.No.2361) from the Supg.Engineer, VI Circle, No.221 C.E., dated 9-4-07.

D.1.

The Supg. Engineer submits an estimate amounting to Rs 3,350 for improvements to No.83 Sathamangalam Kanmoyi, one of the Periyar affected tanks in the Melur taluk, Madura district, ordered to be maintained in G.O., No.1250-I, dated 15th December 1905 and states that an estimate for repairs to the Tank has been sanctioned by the Executive Engineer. The necessity for the proposed improvements is explained in the report.

Order are requested whether the estimate may be checked for sanction.

I Concrete apron may be substituted for roughstone in the weir

19/4/07

Yes. It is very difficult to build a circular tower head in coursed rubble. It may be made square of the ordinary design provided in T.R.S. works

20/4/07

Alterations have been carried out.

16

P.W.D., Irrigation.

Estimates for improvements to No.80 Perungarayan Kanmoy, 82 Navakkutty Kanmoy and No.85 Polimbi Kanmoy, Periyar affected tanks, Melur Taluk, Madura district.

----

pp1-2 c.f. (C.No.2437) from the Supg. Engineer, VI Circle, No.226 C.E., dated 11-4-07

D.I.

Orders are requested whether the estimates may be checked for sanction. The necessity for the proposed improvements is explained in the reports.ˣ It is -- stated that estimates for repairs to the tanks have been sanctioned by the Executive Engineer.

ˣ flagged R, O & P.

p2. c.f.

I

16.4.07

16/4/07

The cost of improvements to all the retained Periyar affected tanks is being charged to the Project.

19/4/07.

Concrete apron may be substituted for rough stone in the weirs of Perungarayan & Navakutti tanks

19/4.

Approved. Polimbi Kanmoy - Sluice at 1100 ft. The front returns barely catch a 1 to 1 Slope. It will be better to adopt the ordinary type of fontwings ~~produced~~ to ground level. The banks can be dressed back to slope of 2 to 1'

C.E.I.

22.4.07

attention carried out.

3/17

Estimate amounting to Rs 1,570 for improvements to No.8 Padathalakurichi Kanmoy.

--

P.W.D., Irrigation.

(C.No.2568) from the Supg. Engineer, VI Circle, No.235 C.E., dated 15-4-07

D.I.

pp 1-5 c.f.

The Supg. Engineer submits an estimate amounting to Rs 1,570/- for improvements to No.8 Padathalakurichi Kanmoy, a Periyar affected tank in the Melur Taluk, Madura district, ordered to be maintained in G.O., No.1250-I, dated 15th December 1905. The -- necessity for the proposed improvements is explained in the report. It is stated that an estimate for - repairs to the tank has been sanctioned by the -- Executive Engineer.

Flag C

pp 3-5 c.f.

·2·

For orders, whether the estimate may be - checked for sanction.

20·4·07.

20/4/07

23/4/07.

The returns (front & rear) of stones would careful scrutiny

23/4/07

C.E.I

25.4.07.

To await reply from SE 6th circle as to the decreased coefficient used in the (tank drainage)

14

~~Current No 2257 dated 6/4/07~~

Subject:- Improvements to No 81 Kalaman Kommoyi Periyar affected tank - Amount of Estimate Rs 1060.

[C No. 2257] From the SE VI Circle no. 213 CE d 29.3.07 DI

Ayacut under the tank is - - - 125.18 acres.

Combined Catchment area = 2.72 Sq miles

Free basin - - - - - - 1.16 "

Maximum flood discharge from do. 588 cusecs.

The estimate provides for

Constructing	a surplus weir at left flank.	Rs 574
"	2 masonry sluices - -	Rs 384
"	1 pipe sluice - -	Rs 102
	Total	Rs 1060

Surplus weir. The max^m flood ~~charge~~ discharge from the Catchment basin has been calculated using coefficients of 350 + 70 in formula $D = CM^{3/4} - cm^{3/4}$. In para 2 of SE's letter it is stated that E.E. Madura Division considers on experience that a coefficient of 350 is sufficient for the locality against 500 usually adopted + that the S.E. also concurs with EE's opinion. Orders are requested if this may be accepted - If C is taken as 500, the discharge to be provided for amounts to 840 cusecs for which a weir 137 ft long is required against 96½ ft allowed + the extra cost will be Rs 200.

Masonry sluices. The head walls in front have now been slightly altered and sloping wings added as shewn instead of returns allowed

19 8

The thickness of the Concrete barrel for sluice at 2788 ft has been increased from 1 ft to 1'-3". The excess on account of these alterations is Rs 46

Pipe sluice at 650 ft. The head walls in front and rear have been slightly altered and sloping wings added to suit the section of the Existing bund. Excess on this account is Rs 64.

The total Excess on account of the above alterations in the sluice designs amounts to Rs. 110.

For orders if the estimate as altered pending approval may be sanctioned.

In taking the Coefficient in Ryves formula as 350, the S.E has had Ramarajapuram surplus in view which never received anything like the quantity expected when it was designed. Before ~~adopting~~ taking 350 for C generally for all works in the Periyar affected area, it would be better to enquire into & ascertain generally the efficiency of surplus works of other tanks with a view to find out whether 350 is sufficient in the case of such works as have ~~passed down good floods~~ been well tried in a few seasons.

[signature]
7/5/07

SB
7.5.07.

I have grave doubts as to the correctness of the catchment basin above Ramarajapuram surplus

DSS

According to the taluk map the drainage area above the Ramarajapuram surplus sluice amounts to 61 sq miles against 75 sq miles given in the history of the Periyar project page 142.

v 6

C. E. I. is well aware of this, I called for the papers once before

certain cross drainage works on the Periar Main Chl were found inadequate in 1895 or 96 put up papers

JWSS

9/5/07.

SB
14.5.07

DEI

No papers can be traced on the subject from the registers in this office.
But in pages 142 + 143 of the Periyar history it is stated that the superpassages designed originally with C = 430 to pass the drainage of the Marugapalai and Shattipar streams were found inadequate and they were therefore subsequently altered to suit a coefficient of 700.

A draft to S.E. is put up herewith for approval.

hw
14/6/07.

P.W.D. Irrigation.

Improvements to Kolamon Kanmoi, Periyar affected tank

C. No. 2257/07) From the Supg Engineer, VI Circle, No. 213 C.E. dated 29th March 1907

D.I.

Information required by D.E.I. as to the inadequacy of cross drainage works in the Periyar main channel cannot be traced in this office A note is being prepared for orders on this and 3 other similar tanks.

Sathamangalam kanmoi.
2. Navakutty Kanmoi
3. Polimbi Kanmoi.

M.V.
11.6.07.

S.B.
11.6.07

There are two superpassages the Shattiar and the Marungaliyar, vide para 15 page 30 of Periyar Blue book. These were found insufficient and the side walls were bingxrei being raised in 1895 when I went to take charge. It will be sufficient torefer Mr. de Chazal to this and ask him to re-consider his -- remarks about the coefficient and ask him to forward the observed discharge calculations We had them once before.

T.W.S.S.
13.6.07

D.I.

The fact at A is explained in pages 142 and 143 of the Periyar history.

A draft to the Supg. Engineer is put up herewith for approval.

M.V.
18.6.07

T.W.S.S.
20.6.07

H.E. C.
20.6.07

(Issued as Memo No. 1488 dated 20th June 1907)

28 ~~2~~ F.5. 559

~~Current no 7058 of 31.10.07.~~

[C No. 7058] from the Supdg Engr VI Circle No. 591 CL dated 30 Octr 07.

Page 7 of c file

D.E.I.

In reply to this office memo 2488/25.6.07. ~~4054/14.10.07.~~ & subsequent reminder 4054/19.10.07. the S.E. VI circle reports that the matter is under reference to with E.E. Madura Dn and will be disposed of as soon as a reply is recd from that office. The Current may therefore lie over until a reply is recd.

Page 8 of c file

S.P. 1.11.07.

[signature] 2/11/07

D.E.I.

In reply to this office Memo No. 2488 dated 25/6/07, the S.E. 6th circle now reports that a coefficient of 500 may be used for calculating the maxm flood discharges from the catchment areas of the tanks instead of 350 used in the estimates submitted for sanction.

Page 7 of cur file flagged E

vide pages 11 & 12 of cur file

The estimates for the improvements of 5 tanks (1 Kolaman, 2 Podathalakurichi, 3 Sathamangalam, 4 Perumparayan and 5 Polimbi kommoytanks) are pending disposal in this office on the subject. Orders are requested if

put up below.

23 6

PUBLIC WORKS DEPARTMENT
(Irrigation Branch).

if the proposed surplus arrangements of these tanks may be revised by using Coefficient 500 (instead of 350 used) for calculating Maxm. flood discharges from the catchment areas. & the Estimates prepared for sanction.

Yes
[signature]
20/12

[initials] 20/12/07 G.S.B. 20.12.07

DEI

The proposed surplus escapes in all the 6 tanks for which estimates [struck out] already [struck out] received in this office have been altered to suit the Maxm. flood discharges calculated with coefficient 500 in formula $D = CM^{3/4}$. and a draft technical note to be embodied in C.E.'s note & order is put up herewith for approval.

[initials] 3/1/08.

CE
Please stamp plans and return file for despatch.
Rs 6/2 stamps
[initials] 4.20 p.m.
7/2/08

DI

A draft order sanctioning the estimates is submitted which may issue under Tour circulation rules.

[initials] 5/2/08 [signature] 5.2.08

Issue
[initials] 6/2/08

2u 10

P.W.D., Irrigation.

Pages 1-8 C.F.

From the Supg. Engineer	VI Circle	No. 213 C.E., dated 29th March 1907.
From	-do-	No. 221 C.E., dated 9th April 1907.
From	-do-	No. 226 C.E., dated 11th April 1907.
From	-do-	No. 235 C.E., dated 15th April 1907
From	-do-	No. 649 C.E., dated 11th December1907

Draft technical note to be embodied in G.O. order made.

D.O.

for approval.

vide pages 1-8 of cur file.

With the letters read above, the Superintending Engineer, VI Circle, submitted 6 estimates amounting to Rs. 1,060, 1,570, 3,350, 2,040, 1,335, and 1,060 for the improvements to 1. Kolaman Konmoi, 2.Padathalakurchi konmoi, 3.Sathamangalam Konmoi, 4.Perungarayan kanmoi, 5.Polimbi Konmoi and 6 Navakkotty Konmoi tanks respectively,.

pages 1+2 of C.F.

2 In the first of the letters read above, the Supg., Engineer reported that the present Ex.Engineer of - Madura (Mr. DeChazal) considered that a coefficient of 350 against 500 generally used in formula $D = CM^{\frac{2}{3}}$ for calculating the maximum flood discharges from the catchment areas of tanks was sufficient and that the surplus works of the tanks were designed to dispose of the discharges from their catchment areas calculated with ~~C = 350 only~~ the lower coefficient.

pages 9+10 of C.F.

3 In this office Memo No. 2488 dated 25th June 1907 the Supg. Engineer was requested to re consider the proposal to reduce the coefficient from 500 to 350 for providing adequate surplus works in the tanks affected by the Periyar project as some superpassages originally designed with a coefficient of 430 were found inadequate during the floods of 1894 and that they were subsequently altered to suit a higher coefficient of 700.

pages 13+14 of C.F.

4 The Supg. Engineer now reports that as the Executive Engineer, ~~Madura Division~~, has not been able to produce any satisfactory reasons for reducing the coefficient from 500 to 350, he is not in favour of using a coefficient lower than 500 for the calculation of the - maximum flood discharges of tanks in the Periyar affected area.

The

25 A

The maximum flood discharges from the catchment areas of the tanks referred to above have now been -recalculated using a coefficient of 500 , the lengths of the surplus escapes being increased accordingly. Besides the alteration in the lengths of the surplus escapes of all the above 6 tanks, concrete aprons have been substituted for drystone aprons provided for the escapes of Sathamangalam, Perungarayan and Navakkutty Konmoi tanks, sloping wings have been allowed for some of the sluices in the Kolaman and Polimbi konmoi tanks and the proposed circular tower head of the sluice in the sathamangalam konmoi has been replaced by a square tower head. These alterations have increased the - amounts of the estimates as detailed below.

1. Kolaman konmoi	from Rs. 1060 to Rs.1330
2. Padathalakurichi konmoi	from Rs. 1570 to Rs.1695
3. Sathamangalam konmoi	from Rs. 3350 to Rs.4035
4. Perungarayan konmoi	from Rs. 2040 to Rs.2560
5. Polimbi konmoi	from Rs. 1335 to Rs.1530
6. Navakkutty konmoi.	from Rs. 1060 to Rs.1330
Total.	Rs. ~~9355~~ to Rs12480

The estimates as revised in this office are recommended for sanction.

[illegible] 31/1/08.

G.C.B. 31-1-08

Approved
[illegible]
1/2/08.

Statement showing the improvements to tanks affected by Periyar in Melur Taluq.

Serial No.	Name of Tanks	Description of works.	Amount of Estimate as submitted	Amount of Estimate as revised	Saving or Excess of Amount.	Remarks
1	No. 81. Kalanam Kanmoy	Waste weir	574	720	146	The length of the weir has been increased from 96½ ft to 137' owing to the increased coefficient of 500
		A pipe sluice (6") at 60 ft.	102	170	68	Owing to the alteration of front & rear head walls slightly and sloping wings added to suit the section
		A masonry sluice at 965 ft.	224	260	36	Owing to the alteration of head wall in front and sloping wings added in front instead of steps
		Do _ do _ at 2788	160	180	20	Do. _ do. _ do _ do _ do. and also the thickness of concrete barrel has been increased from 1' 0"–3"
		Total	1060	1330	270	
2.	No. 8. Padatha Lakuridi Kanmoy	Surplus weir	715	840	125	The length of the weir has been increased to 187 ft owing to the increased coefficient of 500
		Sluices and etc	855	855	..	There are ~~Owing to~~ some alterations in front head walls and wings of sluices
		Total	1570	1695	125	
3.	No. 83. Sathamangalam Kanmoy	Surplus weir	1245	1850	605	Owing to the length of weir has been increased to 207 ft by the increased coefficient of 500 and also the rear apron has been provided with concrete instead of rough stone.
		No. 2 sluice	330	410	80	Owing to the provision of square tower head in front of sluice.
		other works	1775	1775	..	
		Total	3350	4035	685	
4.	No. 80. Perungarayan Kanmoy	Surplus weir	1080	1600	520	Owing to the length of weir has been increased to 150 ft by the increased coefficient of 500 and also the rear apron has been provided with concrete instead of rough stone
		Other works	960	960	..	
		Total	2040	2560	520	
5.	No. 85. Tolimlai Kanmoy	Surplus weir	610	790	180	Owing to the length of weir has been increased to 74·5 ft by the increased coefficient of 500
		Pipe sluice at 1100 ft	315	330	15	Owing to the alteration of front head wall slightly and sloping wings added to suit the section in front.
		Other works	410	410	..	
		Total	1335	1530	195	
6	No. 82. Narakkuttu Kanmoy	Surplus weir	610	870	260	Owing to the length of weir has been increased to 110 ft on account of increased coefficient of 500 and also the rear apron has been provided with the concrete instead of rough stone apron
		Sluices & etc	450	460	10.	Owing to some corrections.
		Total	1060	1330	270	

A.P.V.
13-1-[illegible]

Brief Statement of alterations

Carried out & the cost of alterations

Tour Circulation 27.

CURRENT No. 1392
PASSED ON BY
R. C.
U.
REF.
D. O.

8/2/08

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Improvements to Certain tanks Connected with the Periyar Project

READ the following

From the Supg. Engineer, VI Circle, No. 213 C.E., dated 29-3-07.

From ----------------do----------------221 C.E., dated 9-4-07.

~~From~~----------------do--------------226 C.E., dated 11-4-07.

From ----------------do------------------ 235 C.E., dated 15-4-07.

To ------------------do------------------ No. 2488 dated 25-6-07.

To ------------------do------------------No. 4054 dated 19-10-07.

From ----------------do------------------ No. 591 C.E., dated 30-10-07.

From ----------------do------------------No. 649 C.E., dated 11-12-07.

Quote 188

Print reports (pp15-25 CF)

Note by the Chief Engineer
for Irrigation.

--

Inspection Accounts

gP

X

pp1-8 CF

pp1-2 CF

CA

12/12/08

With the letters read above, the Supg. Engineer, VI Circle, submitted ~~6~~ estimates amounting to Rs 1,060, 1,570 3,350, 2,040, 1,335, and 1,060 for ~~the~~ improvements to 1. Kalaman Konmoi, 2. Padathalakurchi Konmoi, 3. Sathamangalam Konmoi, 4. Perungarayan Konmoi, 5. Polimbi Konmoi and 6 Navakkutty Konmoi tanks respectively.

2. In the first of the letters read above, the Supg. Engineer reported that the present Executive Engineer of Madura (Mr. De Chazal) considered that a co-efficient of 350 against 500 - generally used in formula $D = CM^{\frac{2}{3}}$ for calculating the maximum flood discharge from the catchment areas of tanks was sufficient and that the surplus works of the tanks were designed to dispose

24

10P

pp9-10 CF

of the discharges from their catchment areas calculated with ~~C = 350 only~~ the lower coefficient.

3. In this office Memo No.2488 dated 25th June 1907, the Supg. -- Engineer was requested to reconsider ~~the~~ his proposal to reduce the co-efficient from 500 to 350, in calculating the discharge ~~for providing adequate~~ from surplus works in the tanks affected by the Periyar ~~project~~ System as some super-passages orginally designed with a co-efficient of 430 were found -- inadequate during the floods of 1894 and that they were subsequently altered to suit a higher co-efficient of 700.

pp13-14 CF

4. The Supg. Engineer now reports that as the Executive Engineer has not been able to produce any satis-factory reasons for reducing the - co-efficient from 500 to 350, he is not in favour of using a co-efficient lower than 500 for the calculation of the maximum flood discharges of tanks in the Periyar affected area.

5. The maximum flood discharges from the catchment areas of the tanks referred to above have now been -- recalculated using a co-efficient of 500, the lengths of the surplus escapes being increased accordingly. Besides the alteration in the lengths of the surplus escapes of all the above 6 tanks, concrete aprons have been substituted for drystone aprons -- provided for the escapes of Satha-mangalam, Perungarayan and Navakutty Konmoi tanks, sloping wings have been allowed for some of the sluices in the

(10)

329

Kalaman and Polimbi Konmoi tanks and the proposed circular tower head of the sluice in the Sathamangalam Konmoi has been replaced by a square tower head. These alterations have increased the amounts of the estimates as detailed below:-

1. Kalaman Konmoi.	from Rs 1,060 to Rs 1,330
2. Padathalakurichi Konmoi.	from Rs 1,570 to Rs 1,695.
3. Sathamangalam Konmoi.	from Rs 3,350 to Rs 4,035
4. Perungarayan Konmoi.	from Rs 2,040 to Rs 2,560.
5. Polimbi Konmoi.	from Rs 1,335 to Rs 1,530.
6. Navakutty Konmoi.	from Rs 1,060 to Rs 1,330
Total.	from Rs 9,355 to Rs 12,480.

The estimates as revised in this office are recommended for sanction.

Order thereon. No. 71-I, 11-2-08

The following estimates are sanctioned:-

Imperial.

Irrigation.

49 Capital Expenditure not charged to Revenue.

Periyar ~~Project~~ System

Open Capital Account.

I Works.

3 Distributaries.

C Works.

Unremunerative Work.

(1) Improvements to Kalaman Konmoi.

Estimate -

	Rs
I. Works.	1,330
II. Establishment.	306
Total.	1,636

(2) Improvements to Padathala-kuruchi Konmoi.

Estimate -

I Works. -------------	1,695
II Establishment. -----	390
Total.	2,085

(3) Improvements to Sathamangalam Konmoi.

Estimate -

I. Works. ------------	4,035
II Establishment.	928
Total.	4,963

(4) Improvements to Perungarayan Konmoi.

Estimate -

I Works. ------------	2,560
II Establishment.	589
Total.	3,149

(5) Improvements to Polimbi Konmoi.

Estimate -

I Works. ------------	1,530
II Establishment.	352
Total.	1,882

(6) Improvements to Navakutti Konmoi.

Estimate -

I Works. ------------	1,330
II Establishment.	306
Total.	1,636

2. These sanctions are registered as No. 159 I of 1907-08 and will expire on the 31st March 1909.

3. Ordered that a copy of these Proceedings be forwarded to the Govt. of India for information.

DESPATCHED 17 MAR 1908

Ord. Press

Endorsement. No 72-I 11-2-08

Forwarded.

To

The Chief Engr. for Irrign.
,, Supg. Engr. VI Circle, with plans & estes.
,, Examiner, P.W. Accounts.

5.2.08

6/2/08

DESPATCHED 17 MAR 1908

6/2/08

1388

13